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In re Application of

Application Number

Filed

09/869264

8-1-02

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United States Patent Application Publication No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_

United States Patent Number 6630590, column \_\_\_\_\_, line \_\_\_\_\_, or

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(12) **United States Patent**  
Aki et al.

(10) **Patent No.:** **US 6,630,590 B1**  
(45) **Date of Patent:** **Oct. 7, 2003**

(54) **PROCESS FOR PRODUCING CARBOSTYRIL DERIVATIVES**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

The Summary of the 29<sup>th</sup> Symposium on the Chemistry of Natural Products, pp. 41-43 (1994) (English translation of the Certificate and partial English translation are attached thereto.).

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(List continued on next page.)

(21) Appl. No.: **10/208,740**

(22) Filed: **Aug. 1, 2002**

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 09/869,264, filed on Aug. 5, 2002.

(51) Int. Cl.<sup>7</sup> ..... **C07D 215/16**; C07D 215/20

(52) U.S. Cl. .... **546/158**; 546/157

(58) Field of Search ..... 546/157, 158

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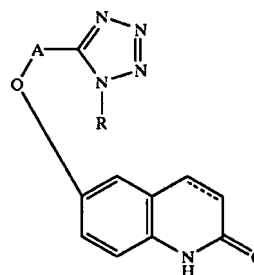
*Primary Examiner*—D. Margaret Scaman

(74) *Attorney, Agent, or Firm*—Finnegan, Henderson, Farabow, Garrett, and Dunner, LLP

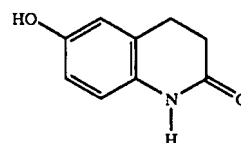
(57)

**ABSTRACT**

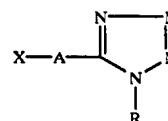
The present invention provides a process for producing carbostyryl derivatives (I) which are known to be useful as medical drug such as antithrombotic agent, cerebral circulation improver, anti-inflammatory agent, antiulcer agent, etc. in a high yield and a high purity. The carbostyryl derivatives (I) can be produced by reacting a carbostyryl derivative (II) with a tetrazole derivative (III) in the presence of a phase transfer catalyst.



(I)



(II)



(III)

**20 Claims, No Drawings**